Claim 4 has been amended to correct a typographical error. No other claims have been amended.

Applicant notes with appreciation the Examiner's indication that claim 4 contains allowable subject matter. New claim 10 is similar to claim 4, and thus also contains allowable subject matter.

Claim 1 stands rejected under 35 U.S.C. Section 102(e) [presumably Section 102(b)] as being alleged anticipated by JP 06-112289. Applicant thanks the Examiner for providing the translation of this reference which was attached to the Office Action. This Section 102 rejection is respectfully traversed for at least the following reasons.

Claim 1 requires "a capacitance structure having known capacitance and configured so as to be serially connectable to the first MIS structure; and a measuring section for measuring synthesis capacitance of the serially-connected first MIS structure and capacitance structure." For example, Fig. 1 of the instant application illustrates that capacitance structure 1 with a known capacitance C1 and the MIS structure 2 to be measured are *serially connected* to one another; and the LCR meter 3 functions as a measuring section in order to measure synthesis capacitance of the *serial connected* structures 2, 3.

JP 6-112289 is entirely unrelated to the invention of claim 1 for at least two reasons. First, JP 6-112289 discloses a *non-contact* type analyzer where the analyzer is spaced apart from the structure to be analyzed. Thus, the JP 6-112289 cannot possibly disclose or suggest the "serially-connected" aspect of claim 1. Second, JP 6-112289 discloses analyzing a MAIS (Metal/Air/Insulator/Semiconductor) structure – but not a

MIS structure. In this respect, JP 6-112289 measures a MAIS, and then uses those measurements to approximate what characteristics would be of a MIS structure.

JP 6-112289, and the problems associated therewith, are discussed on pages 5-7 of the instant specification. The primary problem with JP 6-112289 stems from the fact that is requires measurement of an insulator in a *non-contacting* relation (see pg. 5, line 16 to pg. 6, line 5 of the instant specification). In other words, there is a space (air gap with a capacitance C_{air}) between the contactless measuring device of JP 6-112289 and the insulator to be measured (there can be no serial connection as required in claim 1). This non-contacting requirement of JP 6-112289 is problematic in that it causes errors to occur because the precise spacing required between the measuring device and the insulator cannot be sufficiently controlled and dust therebetween may even lead to short-circuiting in certain instances (e.g., pg. 6, line 12, to pg. 7, line 8, of the instant specification). Another significant problem with JP 6-112289 is that its non-contacting measuring device can only be used immediately after the insulator has been formed (*before* the metal has been formed thereover to form the MIS) – this prevents the device of JP 6-112289 from being efficiently used to analyze boron punch-through which is a significant need in the art (e.g., pg. 7, lines 8-15, of the instant specification). It can be seen that the contactless requirement of JP 6-112289 leads to many problems.

In contrast with JP 6-112289, the invention of claim 1 uses a *serial connection* between a capacitance structure of the measuring device and the MIS to be measured. This is highly advantageous in that it enables a MIS structure to be measured (after the metal has been formed over the insulator) so that boron punch-through can be analyzed

(e.g., pg. 18, lines 9-20, of the instant specification). The short-circuiting problem of JP 6-112289 may also be overcome.

According, it can be seen that JP 6-112289 fails to disclose or suggest the "serially-connected" aspect of claim 1. Instead, the reference teaches directly away from this by requiring a contactless relation. Moreover, JP 6-112289 does not measure an actual MIS structure. Claim 1 is not anticipated, and the reference is entirely unrelated to the invention thereof.

Claim 7 also calls for analyzing characteristics of a MIS structure, and requires serially connecting the first MIS structure to a capacitance structure. Again, JP 6-112289 fails to disclose or suggest these aspects of claim 7.

For at least the foregoing reasons, it is respectfully requested that all rejections be withdrawn. All claims are in condition for allowance. If any minor matter remains to be resolved, the Examiner is invited to telephone the undersigned with regard to the same.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

1. (*Unamended*) An insulator capacitance analyzer for analyzing C-V characteristics of a first MIS structure having unknown capacitance, comprising:

a capacitance structure having known capacitance and configured so as to be serially connectable to the first MIS structure; and

a measuring section for measuring synthesis capacitance of the serially-connected first MIS structure and capacitance structure.

4. (*Amended*) The insulator capacitance analyzer according to claim 1, further comprising:

a plurality of capacitance structures each having known capacitance and configured so as to be serially connectable to the first [MOS]MIS structure; and

a switch for selecting one of the plurality of capacitance structures as the capacitance structure.

Please add the following new claims:

8. (*New*) An insulator capacitance analyzer for analyzing C-V characteristics of a first MIS (Metal/Insulator/Semiconductor) structure, comprising:

a capacitance structure having a known capacitance and serially connected to the first MIS structure; and

a measuring section for measuring a synthesis capacitance of the serially-connected first MIS structure and the capacitance structure.

9. (*New*) The insulator capacitance analyzer of claim 8, wherein the capacitance structure includes at least one of a second MIS structure, a dielectric and a capacitor.

10. (*New*) The insulator capacitance analyzer of claim 8, further comprising a plurality of capacitance structures each having known capacitance and configured so as to be serially connectable to the first MIS structure; and a switch for selecting one of the plurality of capacitance structures as the capacitance structure.